WHAT IS CLAIMED IS:

1. A method of manufacturing a semiconductor element comprising:

forming a plurality of semiconductor elements on a semiconductor wafer such that two adjacent semiconductor elements define a separation boundary; and

providing an integral semiconductor structure across said separation boundary such that said integral semiconductor structure is common to said two adjacent semiconductor elements formed on said semiconductor wafer.

2. The method of Claim 1, wherein said forming a plurality of semiconductor elements comprises forming a plurality of semiconductor laser elements such that two adjacent semiconductor laser elements define a separation boundary.

3. The method of Claim 2, wherein said forming a plurality of semiconductor laser elements comprises forming the plurality of semiconductor laser elements on said semiconductor wafer such that the separation boundary is a light emitting facet for each of the two adjacent semiconductor laser elements.

4. The method of Claim 3, wherein said providing an integral semiconductor structure comprises forming a diffraction grating across said separation boundary such that said diffraction grating is common to said two adjacent semiconductor laser elements formed on said semiconductor wafer.

5. The method of claim 4, wherein said forming a diffraction grating comprises forming one of a distributed feedback (DFB) grating and a distributed Bragg reflector (DBR) grating.

6. The method of Claim 4, wherein said providing an integral semiconductor structure further comprises forming a light waveguide.

7. The method of Claim 3, further comprising cleaving the two adjacent semiconductor elements at said separation boundary.

8. The method of Claim 7, further comprising forming a reflective coating on a cleavage plane of a discrete semiconductor element formed by said cleaving.

9. The method of Claim 2, wherein said forming a

plurality of semiconductor laser elements comprises forming the plurality of semiconductor laser elements on said semiconductor wafer such that the separation boundary is a light reflecting facet for each of the two adjacent semiconductor laser elements.

10. The method of Claim 9, wherein said providing an integral semiconductor structure comprises forming a diffraction grating across said separation boundary such that said diffraction grating is common to said two adjacent semiconductor laser elements formed on said semiconductor wafer.

11. The method of claim 10, wherein said forming a diffraction grating comprises forming one of a distributed feedback (DFB) grating and a distributed Bragg reflector (DBR) grating.

12. The method of Claim 10, wherein said providing an integral semiconductor structure further comprises forming a light waveguide.

13. The method of Claim 9, further comprising cleaving the two adjacent semiconductor laser elements at said separation boundary.

14. The method of Claim 13, further comprising forming a reflective coating on a cleavage plane of a discrete semiconductor laser element formed by said cleaving.

15. The method of Claim 2, wherein said providing an integral semiconductor structure comprises forming one of a light modulator and a light amplifier.

16. The method of Claim 9, further comprising cleaving the two adjacent semiconductor elements at said separation boundary.

17. A method of manufacturing a semiconductor element comprising:

forming a plurality of semiconductor elements on a semiconductor wafer such that a first semiconductor element has second and third semiconductor elements adjacent to the first semiconductor element thereby defining a first separation boundary between the first and second semiconductor elements, and a second separation boundary between the first and third semiconductor elements; and

providing first and second integral semiconductor structures across said first and second separation

boundaries respectively such that said first integral semiconductor structure is common to said first and second semiconductor elements, and said second integral semiconductor structure is common to said first and third semiconductor elements.

18. The method of Claim 17, wherein said forming a plurality of semiconductor elements comprises forming a plurality of semiconductor laser elements such that a first semiconductor laser element has second and third semiconductor laser elements adjacent to the first semiconductor laser element thereby defining a first separation boundary between the first and second semiconductor laser elements, and a second separation boundary between the first and third semiconductor laser elements.

19. The method of Claim 18, wherein said forming a plurality of semiconductor laser elements comprises forming the plurality of semiconductor laser elements on said semiconductor wafer such that the first separation boundary is a light emitting facet for each of the first and second semiconductor laser elements and the second separation boundary is a light reflecting facet for each of the second and third semiconductor laser elements.

20. The method of Claim 19, wherein said providing first and second integral semiconductor structures comprises providing first and second diffraction gratings across said first and second separation boundaries respectively such that said first diffraction grating is common to said first and second semiconductor elements, and said second diffraction grating is common to said first and third semiconductor elements.

21. The method of claim 20, wherein said forming first and second diffraction gratings comprises forming at least one of a distributed feedback (DFB) grating and a distributed Bragg reflector (DBR) grating.

22. The method of Claim 20, wherein said providing first and second integral semiconductor structures further comprises providing at least one light waveguide.

23. The method of Claim 20, further comprising cleaving the two adjacent semiconductor elements at said first and second separation boundaries.

24. The method of Claim 23, further comprising forming a reflective coating on a cleavage plane of a discrete semiconductor element formed by said cleaving.

25. A method of manufacturing a semiconductor element comprising:

forming a plurality of semiconductor elements on a semiconductor wafer;

defining an allowance zone between adjacent semiconductor elements on said semiconductor wafer; and

forming a semiconductor structure at an edge region of one of said semiconductor elements, said semiconductor structure extending into said allowance zone by a predetermined amount.

26. The method of Claim 25, further comprising separating said adjacent semiconductor elements by cleaving a border of said allowance zone and removing said allowance zone such that said semiconductor structure is adjacent to an edge of said one of said semiconductor elements, and said semiconductor structure is absent from the semiconductor element adjacent to said one of said semiconductor elements.

27. The method of Claim 26, wherein said forming a plurality of semiconductor elements comprises forming a plurality of semiconductor laser elements on said semiconductor wafer.

28. The method of Claim 27, wherein said forming a semiconductor structure comprises forming a diffraction grating at an edge region of one of said semiconductor laser elements, said semiconductor structure extending into said allowance zone by a predetermined amount.

29. The method of claim 28, wherein said forming a diffraction grating comprises forming one of a distributed feedback (DFB) grating and a distributed Bragg reflector (DBR) grating.

30. The method of Claim 28, wherein said providing a semiconductor structure further comprises forming a light waveguide.

31. The method of Claim 28, further comprising forming a reflective coating on a cleavage plane of said one of said semiconductor laser elements formed by said cleaving.

32. The method of Claim 31, wherein said forming a reflective coating comprises forming a reflective coating suitable to provide a light emitting facet for said semiconductor laser element.

33. The method of Claim 31, wherein said forming a reflective coating comprises forming a reflective coating suitable to provide a light reflecting facet for said semiconductor laser element.

34. The method of Claim 27, wherein said forming a semiconductor structure comprises forming one of a light modulator and a light amplifier at an edge region of one of said semiconductor laser elements, said semiconductor structure extending into said allowance zone by a predetermined amount.

35. The method of Claim 26, wherein

said forming a semiconductor structure comprises forming a semiconductor structure at an edge region of one of said semiconductor elements, said semiconductor structure extending into said allowance zone by an amount of a margin of error in said cleaving, and

said defining an allowance zone comprises defining an allowance zone between adjacent semiconductor elements on said semiconductor wafer, said allowance zone being at least double the margin of error in providing said cleaving.

36. The method of Claim 35, wherein said margin of error

is approximately equal to 20μm.

37. A semiconductor element manufactured using a method of manufacturing a semiconductor element comprising the steps of:

forming a plurality of semiconductor elements on a semiconductor wafer such that two adjacent semiconductor elements define a separation boundary; and

providing an integral semiconductor structure across said separation boundary such that said integral semiconductor structure is common to said two adjacent semiconductor elements formed on said semiconductor wafer.

38. A semiconductor element manufactured using a method of manufacturing a semiconductor element comprising the steps of:

forming a plurality of semiconductor elements on a semiconductor wafer such that a first semiconductor element has second and third semiconductor elements adjacent to the first semiconductor element thereby defining a first separation boundary between the first and second elements, and a second separation boundary between the first and third semiconductor elements; and

providing first and second integral semiconductor

structures across said first and second separation boundaries respectively such that said first integral semiconductor structure is common to said first and second semiconductor elements, and said second integral semiconductor structure is common to said first and third semiconductor elements.

39. A semiconductor element manufactured using a method of manufacturing a semiconductor element comprising the steps of:

forming a plurality of semiconductor elements on a semiconductor wafer;

defining an allowance zone between adjacent semiconductor elements on said semiconductor wafer; and

forming a semiconductor structure at an edge region of one of said semiconductor elements, said semiconductor structure extending into said allowance zone by a predetermined amount.